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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,223	07/17/2003	Atilla Grauzer	PA0863.ap.US	6337

7590 04/18/2007
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EXAMINER

HALL, ARTHUR O

ART UNIT	PAPER NUMBER
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3709

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/18/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/623,223

Applicant(s)

GRAUZER ET AL.

Examiner

Arthur O. Hall

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/24/2003; 7/6/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 11/24/2003 and 7/6/2004 have been acknowledged by the examiner.

Drawings

The drawings are objected to under 37 CFR 1.83(b) because they are incomplete. 37 CFR 1.83(b) reads as follows:

When the invention consists of an improvement on an old machine the drawing must when possible exhibit, in one or more views, the improved portion itself, disconnected from the old structure, and also in another view, so much only of the old structure as will suffice to show the connection of the invention therewith.

The drawings are objected to because Fig. 9 is described as a side view of a shuffling device with camera and Fig. 10 is described as a top view of a shuffling device with camera; however, neither of the views appear to have all of the same components and there exists no cross-section marking nor label thereof on either drawing to show how one view relates to the other view.

The drawings are objected to under 37 CFR 1.83(a) because they fail to show reference character 900 in Fig. 10 as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d).

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "904" in Fig. 10 and "804" in Fig. 9 have both been used to designate a pick-off roller. The drawings are objected to as failing to comply with 37

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CFR 1.84(p)(4) because reference characters "906" in Fig. 10 and "806" in Fig. 9 have both been used to designate a pick-off roller.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: reference characters 940 and 908.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

In addition to Replacement Sheets containing the corrected drawing figure(s), applicant is required to submit a marked-up copy of each Replacement Sheet including annotations indicating the changes made to the previous version. The marked-up copy

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must be clearly labeled as "Annotated Sheets" and must be presented in the amendment or remarks section that explains the change(s) to the drawings. See 37 CFR 1.121(d)(1). Failure to timely submit the proposed drawing and marked-up copy will result in the abandonment of the application.

The drawings are replete with the above informalities and errors. Applicant should review all drawings and correct all informalities and errors.

Specification

The abstract of the disclosure is objected to because the abstract exceeds 150 in length. Correction is required. See MPEP § 608.01(b).

The disclosure is objected to because of the following informalities: reference characters 908 and 940 shown in Fig. 10, but are not disclosed in the specification.

Appropriate correction is required.

Claim Objections

Claim 39 is objected to because of the following informalities: Claim 39 recites a method comprising two features; however, the claim language is not sufficient to clarify the existence of two features. Examiner suggests that the applicant connect the two features with a logical operator such as an "and" term.

Appropriate correction is required.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 and 30 are each provisionally rejected on the ground of nonstatutory double patenting over claim 1 combined with claim 2 of copending Application No. 10/954,029. Claims 37, 46 and 54 are provisionally rejected on the ground of nonstatutory double patenting over claim 24, 26 and 30, respectively, of copending Application No. 10/954,029. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are of substantially the same scope, as follows:

The following claim charts show the claim-to-claim comparison between both applications:

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<p>Claim 1: A device for</p> <p>forming a random set of playing cards comprising:</p> <p>a top surface and a bottom surface of said device;</p> <p>a single card receiving area for receiving an initial set of playing cards;</p> <p>a randomizing system for randomizing the order of an initial set of playing cards;</p> <p>a collection surface in a card collection area for receiving randomized playing cards one at a time into the card collection area, the collection surface receiving cards so that all cards are received below the top surface of the device;</p> <p>an image capture device that reads the rank and suit of each card before being received on the card collection surface;</p> <p>an elevator for raising the collection surface so that at least some randomized cards are elevated at least to the top surface of the device; and</p>	<p>Claim 1: A multiple mode device for performing at least one operation selected from the group consisting of verifying cards and randomizing an order of cards comprising:</p> <p>a top surface and a bottom surface of said device;</p> <p>a single card receiving area for receiving an initial set of playing cards;</p> <p>a randomizing system for randomizing the order of an initial set of playing cards,</p> <p>wherein at least a portion of the randomizing system can be disabled in a verifying mode;</p> <p>a collection surface in a card collection area for receiving playing cards one at a time into the card collection area, the collection surface receiving cards so that all cards are received below the top surface of the device;</p> <p>an image capture device that reads the rank and suit of each card before being received on the card collection surface;</p> <p>an elevator for raising the collection surface so that at least some cards are elevated at least to the top surface of the device; and</p>

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<p>(inherently occurs after the randomization process)</p> <p>a moveable cover over the elevator.</p>	<p>at least one processor programmed to perform at least one of the following functions: a) compare stored card values to stored values to verify the cards, and b) to randomize an order of cards; and b) both to verify the cards and to randomize the cards.</p> <p>Claim 2: The device of claim 1 wherein during a randomizing mode cards are placed on the elevator in a random order, and further comprising</p> <p>a moveable cover over the elevator.</p>
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10/623,223	10/954,029
<p>Claim 30: A device for</p> <p>forming a random set of playing cards comprising:</p> <p>a top surface and a bottom surface of said device;</p> <p>a single card receiving area for receiving an initial set of playing cards;</p> <p>a randomizing system for randomizing the order of an initial set of playing cards;</p> <p>a collection surface in a card collection area for receiving randomized playing cards one at a time into the card collection area, the collection surface receiving cards so that all cards are</p>	<p>Claim 1: A multiple mode device for performing at least one operation selected from the group consisting of verifying cards and randomizing an order of cards comprising:</p> <p>a top surface and a bottom surface of said device;</p> <p>a single card receiving area for receiving an initial set of playing cards;</p> <p>a randomizing system for randomizing the order of an initial set of playing cards,</p> <p>wherein at least a portion of the randomizing system can be disabled in a verifying mode;</p> <p>a collection surface in a card collection area for receiving playing cards one at a time into the card collection area, the collection surface receiving cards so that all cards are received below the top</p>

<p>received below the top surface of the device;</p> <p>an image capture device that reads the rank and suit of each card after it has begun leaving the single card receiving area and before being received on the card collection surface;</p> <p>an elevator for raising the collection surface so that at least some randomized cards are elevated at least to the top surface of the device; and</p> <p>(inherently occurs after the randomization process)</p> <p>a moveable cover over the elevator.</p>	<p>surface of the device;</p> <p>an image capture device that reads the rank and suit of each card before being received on the card collection surface;</p> <p>an elevator for raising the collection surface so that at least some cards are elevated at least to the top surface of the device; and</p> <p>at least one processor programmed to perform at least one of the following functions: a) compare stored card values to stored values to verify the cards, and b) to randomize an order of cards; and b) both to verify the cards and to randomize the cards.</p> <p>Claim 2: The device of claim 1 wherein during a randomizing mode cards are placed on the elevator in a random order, and further comprising</p> <p>a moveable cover over the elevator.</p>
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<p>Claim 37: A method of randomizing a group of cards, comprising the steps of:</p> <p>placing a group of cards to be randomized into a card in-feed tray;</p>	<p>Claim 24: A method of processing a group of cards, comprising the steps of:</p> <p>placing a group of cards to be processed into a card in-feed tray;</p> <p>providing a multiple-mode card-handling device;</p> <p>selecting a mode of operation of the multiple-mode device selected from the group consisting of card verification,</p>

<p>removing cards individually from the card in-feed tray and delivering the cards into a card collection area, the card collection area having a moveable lower surface, and a stationary opening for receiving cards from the in-feed tray;</p> <p>(See reading the rank of each card below; reading the rank of each card is part of the process of imaging cards)</p> <p>elevating the moveable lower surface to a randomly determined height;</p> <p>grasping at least one edge of a group of cards in the card collection area at a point just above the stationary opening;</p> <p>lowering the moveable lower surface to create an opening in a stack of cards formed on the lower surface, the opening located just beneath a lowermost point where the cards are grasped;</p> <p>inserting a card removed from the in-feed tray into the opening;</p> <p>after randomizing all cards, elevating a collection of randomized cards; and</p> <p>reading at least the rank of each card after it is individually removed from the card in-feed tray and before it has been</p>	<p>randomization and simultaneous card verification and randomization;</p> <p>removing cards individually from the card in-feed tray and delivering the cards into a card collection area, the card collection area having a moveable lower surface, and a stationary opening for receiving cards from the in-feed tray;</p> <p>imaging cards prior to the cards entering the card collection area (imaging inherently occurs after removal from the in-feed tray and before insertion into the opening since the opening is at the card collection area)</p> <p>during verification;</p> <p>elevating the moveable lower surface to a randomly determined height during randomization;</p> <p>grasping at least one edge of a group of cards in the card collection area at a point just above the stationary opening during randomization;</p> <p>lowering the moveable lower surface to create an opening in a stack of cards formed on the lower surface, the opening located just beneath a lowermost point where the cards are grasped during randomization;</p> <p>inserting a card removed from the in-feed tray into the opening;</p> <p>after processing the cards, elevating a collection of cards; and</p> <p>(See imaging cards above; the imaging process has reading the rank of each card as part of its process)</p>
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inserted into the opening.	when the cards have been imaged, comparing the read values with stored values to verify the cards.
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<p>Claim 46: A device for forming a random set of playing cards comprising:</p> <p>a top surface and a bottom surface of said device;</p> <p>a single card receiving area for receiving an initial set of playing cards;</p> <p>a randomizing system for randomizing the order of an initial set of playing cards;</p> <p>a single collection surface in a card collection area for receiving randomized playing cards one at a time into the single card collection area to form a single randomized set of playing cards, the single collection surface receiving cards so that all playing cards from the initial set of playing cards are received below the top surface of the device;</p> <p>an image capture device that reads the rank and suit of each card after it has begun leaving the single card receiving area and before being received on the single card collection surface; and</p> <p>access for removal of the single randomized set of playing cards as a complete set.</p>	<p>Claim 26: A device for forming a random set of playing cards comprising:</p> <p>a top surface and a bottom surface of said device;</p> <p>a single card receiving area for receiving an initial set of playing cards;</p> <p>a randomizing system for randomizing the order of an initial set of playing cards,</p> <p>wherein the randomizing system can be disabled during operation;</p> <p>a single collection surface in a card collection area for receiving randomized playing cards one at a time into the single card collection area to form a single randomized set of playing cards, the single collection surface receiving cards so that all playing cards from the initial set of playing cards are received below the top surface of the device;</p> <p>an image capture device that reads the rank and suit of each card after it has begun leaving the single card receiving area and before being received on the single card collection surface; and</p> <p>access for removal of the single randomized set of playing cards as a complete set.</p>

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Claim 54: A device for shuffling cards, comprising: a card receiving area for receiving an initial set of unshuffled cards; a card randomizing system for randomizing an order of the cards; a first sensor for sensing a position of cards between the card receiving area the card randomizing system; a second sensor for sensing rank and/or suit or each card: and a microprocessor that activates the second sensor upon receiving a card present signal from the first sensor.	Claim 30: A multiple mode card handling device for shuffling cards and verifying groups of cards comprising: a card receiving area for receiving an initial set of unshuffled cards; a card randomizing system for randomizing an order of the cards, wherein the card randomization system can be deactivated during use; a first sensor for sensing a position of cards between the card receiving area and the card randomizing system; a second sensor for sensing rank and/or suit or each card; and a microprocessor that activates the second sensor upon receiving a card present signal from the first sensor.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 9, 19, 31, 46 and 48 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9, which is dependent from claim 17, recites the limitation "the collection area" in the text of claim 9, but claim 17 does not contain the feature "a collection area". There is insufficient antecedent basis for this limitation in the claim. The Examiner suggests that applicant re-write claim 9 to depend from claim 1.

Claim 19, which is dependent from claim 25, recites the limitation "the microprocessor" in the text of claim 19, but claim 25 does not contain the feature "a microprocessor". There is insufficient antecedent basis for this limitation in the claim.

Claim 31 recites the limitation " a card mixing compartment that identifies a position for each card in each set of cards formed in the card mixing compartment" in the text of claim 31, but it is unclear as to the meaning of the feature "a card mixing compartment" because a card mixing compartment certainly cannot perform the functions recited within itself. Also, claim 31 recites the feature of "at least one stationary gripping element" and thereafter recites the limitation of "the gripping arm." The feature, "the gripping arm," cannot be one of the "at least one stationary gripping elements" since an arm may or may not be an element. There is insufficient antecedent basis for these limitations in the claim.

Claim 46 recites the limitation " access for removal of the single randomized set of playing cards as a complete set" in the text of claim 46; however, it is unclear as to the structure of "access". Examiner cannot discern whether "access" is a hole or space, which are indefinite terms or whether "access" refers to an aperture or other structural feature that contains a hole or space. Examiner suggests that applicant recite "access"

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as “an access” or other term that provides sufficient structure. There is insufficient antecedent basis for this limitation in the claim.

Claim 48 recites the limitation “ wherein an elevator for raising the playing card collection surface so that at least some randomized cards are elevated above to the top surface of the device for removal as the access” in the text of claim 48; however, it is unclear as to meaning of this phrase as recited. Examiner finds that applicant meant for the elevator to perform the functions recited so that the cards are presented above the surface for removal --from-- the access; however, claim 48 does not convey this meaning. Examiner suggests that applicant rewrite claim 48 to properly recite the applicant’s intended meaning. There is insufficient antecedent basis for this limitation in the claim.

The claims are replete with the above antecedent basis problems. Applicant should review all claims and correct all antecedent basis problems.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-5, 7-8, 22-23, 29, 30-34, 37, 39, 41-43, 45-47 and 50-54 are rejected under 35 U.S.C. 102(b) as being anticipated by Johnson et al. (US 6,267,248; hereinafter Johnson ‘248). Johnson discloses all features of the claimed invention

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(Figure 2 in parentheses is cited with a reference character or explanation thereafter), including the following apparatus and process:

Regarding claims 1, 23, 30, 31, 37, 43, 45, 46, and 54

a device / automatic card shuffling device / automatic card shuffler for forming / randomizing / shuffling a random set or group of playing cards (column 2, lines 33-35, Johnson '248; the method merely provides the steps carried out by the apparatus) comprises:

a housing capable of being mounted into a gaming table surface (column 5, line 61, Johnson '248);

a top surface and a bottom surface of said device (Fig. 2, Johnson '248; it is shown that the device inherently has a top and bottom surface);

a single card receiving area / card receiving area / receiving area / in-feed compartment for receiving an initial set of unshuffled playing cards to be randomized (column 1, lines 59-60 and Fig. 2, 12, Johnson '248);

a card moving mechanism for moving cards individually from the in-feed compartment into a card mixing compartment (column 2, lines 38-39, Johnson '248);

a randomizing system / card randomizing system / card randomization mechanism for randomizing an order / the order of an initial set of playing cards (column 2, lines 43-45 and column 1, lines 53-58, Johnson '248) wherein an image capture device identifies at least the rank of each card in the initial set of playing cards before each card is positioned on a collection surface for receiving randomized cards (column 2, lines 27-31 and lines 36-37, column 5, lines 8-11 and Fig. 2, 15, Johnson '248);

a single collection surface / collection surface / card mixing compartment / card receiver in a card collection area for receiving or accepting a group of randomized playing cards to be shuffled, or in the alternative, one at a time into the single collection area / card collection area so as to identify a position for each card in each set of cards formed in the card mixing compartment in order to form a single randomized set of

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playing cards (column 1, lines 38-39, column 2, lines 40-41 and lines 59-60 and Fig. 2, 12, Johnson '248; each card is stored individually, which inherently means one at a time), the single collection surface / collection surface receiving cards so that all playing cards / cards from the initial set of playing cards are received below the top surface of the device (column 2, lines 4-7 and lines 62-63 and Fig. 2, Johnson '248; it is shown that the cards are received in the storing spaces below a top surface);

at least one card supporting element within the card collection area that will support a predetermined number of cards within the card collection area (column 2, lines 18-26 and column 3, lines 28-30, Johnson '248; the partitions shown above and below the storing spaces support the cards within the card magazine in cooperation with the unloading conveyor and collector tray);

a first sensor for sensing a position of cards between the card receiving area and the card randomizing system (column 5, lines 7-8, Johnson '248);

an image capture device / image capture system / second sensor that reads / senses / identifies at least the rank and/or the rank and suit of each at least one card before being received on the card collection surface or, in other words, before it is inserted into a set of cards at a position below the predetermined number of cards or, in other words, after it has begun leaving the single card receiving area and before being received on the single card collection surface / card collection surface or, in other words, as it is moved towards, into or through the card mixing compartment, but before removal from the device (column 2, lines 27-31 and lines 36-37, column 5, lines 8-11 and Fig. 2, 15, Johnson '248);

a memory that records at least the rank of each card in each set of cards formed in the card mixing compartment (column 4, lines 7-15, Johnson '248); wherein the card mixing compartment comprises a plurality of substantially vertical supports (Fig. 2, Johnson '248; the partitions are substantially vertical), an opening for the passage of cards from the in-feed compartment (Fig. 2, 23, Johnson '248), a moveable lower support surface (Fig. 2, Johnson '248; each partition is moveable); at least one stationary gripping element (Fig. 2, Johnson '248; the partitions act as gripping elements), a lower edge proximate the opening (Fig. 2, Johnson '248; a lower edge is

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inherently shown at the opening 23), the gripping arm capable of suspending cards above the opening (Fig. 2, Johnson '248; the partitions are shown suspended above the opening with storing space for cards;

a microprocessor with the memory for controlling the operation of the device / card shuffler and activating the image capture device / image capture system / second sensor upon receiving a card present signal from the first sensor (column 1, lines 53-58 and lines 60-65 and column 2, line 42, Johnson '248);

a controller for controlling the card randomization mechanism (column 4, lines 61-63, Johnson '248) by means of a user-manipulated remote control device (column 5, lines 42-53, Johnson '248; a number of user-manipulated applications of the device are described, which inherently must be remote for the user to access);

a card moving sequence programmed in memory that enables the automatic card shuffler to move a set of cards from a card receiving position to a card collection area in the shuffler in a non-shuffling event (column 1, line 65 to column 2, line 3 and column 4, lines 58-60, Johnson '248), and to read the rank and suit of each card between the card receiving position and the card collection area in the non-shuffling event (column 2, lines 27-31 and lines 36-37, column 5, lines 8-11 and Fig. 2, 15, Johnson '248);

an elevator for raising and lowering the collection surface or moveable support surface within the card collection area so that at least some randomized cards are elevated at least to the top surface of the device or to an elevation proximate the gaming table surface (column 2, lines 8-11 and 46-48 and column 3, lines 61-65, Johnson '248; it is shown that the cards in the storing spaces are raised to a top surface and the drive 22 may lower or raise the magazine);

a moveable cover over the elevator (column 3, lines 50-55 and Fig. 2, 25 and 25a, Johnson '248); and

access for removal of the single randomized set of playing cards as a complete set (Fig. 2, 26, Johnson '248).

Regarding claims 37 and 39,

a method of randomizing / arranging a group of cards into a desired order in a computer controlled automatic card shuffler (column 2, lines 33-35, Johnson '248; the method merely provides the steps carried out by the apparatus) in which the card shuffler comprises an in-feed tray, a feed mechanism, a card arranging area, a retaining device for suspending cards in the card arranging area, a lower support surface in the card arranging area and an elevator for raising and lowering the lower support surface (all card shuffler features are disclosed as described above) comprises or comprises the steps of:

placing a group of cards to be randomized into a card in-feed tray (column 1, lines 59-60 and Fig. 2, 12, Johnson '248);

removing cards individually from the card in-feed tray and delivering the cards into a card collection area (column 2, lines 38-39, Johnson '248), the card collection area having a moveable lower surface, and a stationary opening for receiving cards from the in-feed tray (column 1, lines 38-39 and column 2, lines 40-41, Johnson '248; each card is stored individually between the partitions, which are moveable);

assigning each card in the in-feed tray a final order (column 2, lines 43-45 and column 1, lines 53-58, Johnson '248);

elevating the moveable lower surface to a randomly determined height (column 2, lines 8-11 and 46-48 and column 3, lines 61-65, Johnson '248; it is shown that the drive 22 may lower or raise the magazine along with the storing spaces to a height that is inherently determined at random in a randomizing system);

grasping at least one edge of a group of cards in the card collection area at a point just above the stationary opening (column 2, lines 18-26 and column 3, lines 28-30, Johnson '248; the partitions shown above and below the storing spaces support the cards within the card magazine in cooperation with the unloading conveyor and collector tray);

lowering the moveable lower surface to create an opening in a stack of cards formed on the lower surface, the opening located just beneath a lowermost point where the cards are grasped (column 2, lines 8-11 and 46-48 and column 3, lines 61-65, Johnson '248; it is shown that the drive 22 may lower or raise the magazine along with

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the storing spaces to a height that is inherently determined at random in a randomizing system);

inserting / feeding a card / each card individually removed from the in-feed tray into the opening in card arranging area after at least the rank of each card has been mechanically read to form a final set of cards (column 2, lines 38-39, Johnson '248);

after randomizing all cards, elevating a collection of randomized cards (column 2, lines 8-11 and 46-48 and column 3, lines 61-65, Johnson '248; it is shown that the cards in the storing spaces are raised to a top surface); and

reading at least the rank of each card after it is individually removed from the card in-feed tray and before it has been inserted into the opening (column 2, lines 27-31 and lines 36-37, column 5, lines 8-11 and Fig. 2, 15, Johnson '248).

Regarding claim 3, at least one pick-off roller removes cards one at a time from the card receiving area and moves cards one at a time towards the randomizing system and the image capture device can read a card only after it has been moved by the at least one pick-off roller (Fig. 2, Johnson '248; the limitation recited is shown).

Regarding claim 4, at least one pair of rollers receives each card from the at least one pick-off roller before the image capture device can read each card (Fig. 2, Johnson '248; the limitation recited is shown).

Regarding claim 5, a microprocessor controls movement of the pick-off roller and the at least one pair of rollers (column 2, line 42 and Fig. 2, 16, Johnson '248).

Regarding claims 7 and 8, one card at a time is positioned into a randomized set of playing cards over the collection surface, or in other words, the randomization system moves one card at a time into an area overlying the collection surface, which occurs after the one card has been read for suit and rank (Fig. 2, 24, Johnson '248; the randomizing system is inherently capable of placing each card in a storing space between randomized cards since the device, as shown, is constructed to perform in this

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manner in a configuration in which the collection surface is internal to the card magazine 20).

Regarding claim 22, a microprocessor is controllably connected to the device, the microprocessor directing movement of playing card moving elements within the device, the microprocessor randomly assigning potential positions for each card within the initial set of playing cards, and then directing the device to arrange the initial set of playing cards into those randomly assigned potential positions to form a randomized final set of playing cards with each card in the randomized set having been read for at least rank (column 1, lines 53-58 and lines 60-65, Johnson '248).

Regarding claim 29, a memory records the reading of each at least one card inserted into a set of cards and the position of each card within the final set of cards is identified to create an index of all cards in a final set of cards (column 2, lines 27-31 and lines 36-37, column 4, lines 7-15, column 5, lines 7-11 and Fig. 2, 15, Johnson '248).

Regarding claim 32, the image capture system identifies at least suit and rank for each card as it is moved towards, into or through the card mixing department, but before removal from the device (column 2, lines 27-31 and lines 36-37, column 5, lines 8-11 and Fig. 2, 15, Johnson '248).

Regarding claim 33, a final set of cards comprising all cards and at least fifty-two cards in the device are recorded in memory informationally connected to the device with respect to position within the final set and at least the rank of each card in the final set of cards (column 1, line 66 to column 2, line 3, column 4, lines 7-15 and column 5, lines 8-11, Johnson '248).

Regarding claim 34, suit and rank of each card in the final set of cards is recorded (column 4, lines 7-15 and column 5, lines 8-11, Johnson '248).

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Regarding claim 41, the final order is random and each individual card in the final set of cards is identified by at least rank and position within the final set of cards (column 1, lines 53-58 and column 5, lines 7-11, Johnson '248).

Regarding claim 42, each individual card in the final set of cards is identified by at least rank, suit and position within the final set of cards (column 5, lines 7-11, Johnson '248).

Regarding claim 47, the playing card collection surface comprises a surface that is moved by an elevator (column 2, lines 8-11 and 46-48, Johnson '248; it is shown that partitions enclosing card storing spaces are raised to a top surface).

Regarding claim 50, multiple playing cards are present only in the single card receiving area and the single card collection area (Fig. 2, 12, 20 and 24, Johnson '248; it is shown that cards may only be located in the two areas disclosed)

Regarding claims 51, 52 and 53, the automatic card shuffler has a program embedded in memory in the device that can be activated to move cards from the card receiving area to the card collection area without randomization (column 4, lines 7-15 and column 1, lines 53-58, Johnson '248; cards may be sorted in original or random order), the rank and suit of each card being read between the card receiving area and the card collection area to verify the content of a complete set of cards placed into the card receiving area (column 2, lines 27-31 and lines 36-37, column 5, lines 8-11 and Fig. 2, 15, Johnson '248).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 6, 9-11, 24-28, 35-36, 38, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson '248 in view of Johnson '085. Figures are described with reference characters where necessary for clarity.

Johnson '248 discloses all the features described above. The claimed features of claims 6, 9-11, 24-28, 35-36, 38, and 40 that are substantially lacking in Johnson '248, but taught by Johnson '085 are as follows:

Regarding claim 6, when a first card being moved by the pick-off roller is being moved by the at least one pair of rollers, movement of the pick-off roller is altered so that no card other than the first card is moved by either the pick-off roller or the at least one pair of rollers (column 6, lines 1-10 and column 7, lines 4-6 and lines 48-55, Johnson '085).

Regarding claim 9, the collection area is bordered on two opposed sides by two movable card gripping elements (column 5, lines 29-35 and Fig. 5, 69 and 72, Johnson

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'085).

Regarding claim 10, an insertion point to the card collection area is located below a bottom edge of the two movable card gripping elements (column 7, lines 19-23 and Fig. 8, 25 and 34, Johnson '085).

Regarding claim 11, the card collection surface is vertically positionable within the card collection area (Figs. 7-10, 25, Johnson '085).

Regarding claim 24, at least one card supporting element comprises an element on at least one side of the card collection area that can move inwardly within the card collection area to contact and support the predetermined number of cards within the card collection area (column 5, lines 29-35, column 7, lines 11-15 and Fig. 5, 69 and 72, Johnson '085).

Regarding claim 25, the at least one card supporting element comprises at least two opposed card supporting elements that move inwardly within the card collection area to contact and support the predetermined number of cards within the card collection area (column 5, lines 29-35, column 7, lines 11-15 and Fig. 5, 69 and 72, Johnson '085).

Regarding claim 35, a position of the elevator is randomly selectable and the support surface is movable to the selected position, and after the gripping element grasps at least one side of the cards, the elevator lowers, creating a space beneath the gripping element, wherein a card is moved from the in-feed compartment through the opening and into the space, thereby randomizing the cards (column 7, lines 9-23 and Figs. 7-10, Johnson '085).

Regarding claim 36, two stationary gripping elements are provided to grip opposite sides of a set of cards in the mixing compartment (column 5, lines 29-35 and

Fig. 5, 69 and 72, Johnson '085).

Regarding claim 38, after a card has been inserted, and when a presence of at least one additional card in the card in-feed tray is sensed, the elevator moves to another randomly determined height, creating another opening (column 7, lines 9-23 and lines 44-55 and Figs. 7-10, Johnson '085; process of randomization is repeated).

Regarding claim 40, the lower support surface is lowered beneath an elevation of the card feed mechanism when the computer instructs that the card being fed is to be placed on top of the stack (column 6, lines 62 to column 7, lines 1-3, Johnson '085),

a) suspending all cards in the card arranging area by means of the retaining device when the computer instructs that the card being fed is to be placed on the bottom of the stack (column 7, lines 9-19, column 8, lines 2-4 and Figs. 7-8, Johnson '085), and

b) instructing the elevator to move, causing the lower support surface to adjust to a preselected elevation, retaining a subgroup of cards above a feed elevation and lowering the lower surface, creating an opening, and placing a card between the subgroup of suspended cards and the remaining cards supported by the lower support surface (column 7, lines 19-27, column 8, lines 2-4 and Figs. 9-10, Johnson '085).

Johnson '248 discloses a card-shuffling apparatus for shuffling game cards having essentially a circular, rotatable card collection surface and fixed grippers.

Similarly, Johnson '085 provides a card shuffling apparatus for shuffling game cards in which the card collection surface is essentially vertically positionable and has moveable grippers.

Johnson '085 suggests that gambling games need efficient card shuffling devices that shuffle and supply single or multiple card packs to a user (column 1, lines 29-35 and column 3, lines 7-10, Johnson '085).

Thus, it would have been obvious to one having ordinary skill in the art at the time the applicant's invention was made to modify Johnson '248 in view of the teachings of Johnson '085 for the purpose of providing the card shuffling device of Johnson '248, which already has the collection surface and gripper configurations described above, with a vertically positionable card collection surface and moveable grippers, respectively, in order to make card shuffling devices more efficient.

Claims 12-13 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson '248 in view of Johnson '085 as applied to claims 1, 9 and 11 and 46 and 47, respectively, above, and further in view of Albrecht (US Patent 6,250,632). Figures are described with reference characters where necessary for clarity.

Johnson '248 and Johnson '085 disclose all the features described above. The claimed features of claims 12-13 and 48 that are substantially lacking in Johnson '248 alone or in view of the features of Johnson '085, but taught by Albrecht are as follows:

Regarding claim 12, the card collection surface is moved by a motivator that is able to move incremental vertical distances that are less than the thickness of a playing card (column 9, lines 8-14, Albrecht; it is known in the art to calibrate devices relative to the thickness of the material that the device manipulates).

Regarding claim 13, the motor is a stepper motor or an analog motor (column 9, lines 22-26, Albrecht).

Regarding claim 48, an elevator for raising the playing card collection surface so that at least some randomized cards are elevated above to the top surface of the device for removal as the access (column 9, lines 44-55 and Fig. 5d, 46, Albrecht).

Albrecht suggests that a single shuffling device is needed that is compact and requires little skill or training of its user for operation (column 4, lines 27-34, Albrecht).

Thus, it would have been obvious to one having ordinary skill in the art at the time the applicant's invention was made to modify Johnson '248 in view of the teachings of Johnson '085 and further in view of Albrecht for the purpose of exchanging the interchangeable features of the card shuffling apparatus of Johnson '248 alone or in combination with the features of Johnson '085 with the features of Albrecht for performing device calibration and card delivery in order to make card shuffling devices more automatic and require less user intervention.

Claims 14-21 and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson '248 in view of Johnson '085 as applied to claims 1 and 23, respectively, above, and further in view of Purton et al. (International Patent Application Publication WO 00/51076; hereinafter Purton). Figures are described with reference characters where necessary for clarity.

Johnson '248 and Johnson '085 disclose all the features described above. The claimed features of claims 14-21 and 26-28 that are substantially lacking in Johnson '248 alone or in view of Johnson '085, but taught by Purton are as follows:

Regarding claim 14, a sensor is present along a line of movement of cards in the device within the single card receiving area or adjacent the single card receiving area and after the image capture device, the sensor indicating a trigger position of a moving card to initiate a timed capture of an image by the image capture device (column 10, lines 10-14 and Fig. 6, 153 and 156, Purton).

Regarding claim 15, at least one microprocessor is present in the device and the at least one microprocessor controls vertical movement of the card collection surface and camera triggering (column 12, lines 18-27, Purton).

Regarding claim 16, at least a second sensor identifies the position of the card collection surface so as to place a top card in the collection area at a position that is level with or above the bottom of at least one card gripping element that is movable from at least one side of the collection area towards playing cards within the card collection area (column 8, line 22 to column 9, line 3 and Fig. 6, 153 and 156, Purton).

Regarding claims 17 and 26, the microprocessor is communicatively connected to the device and programmed to determine a distance that the card collection surface must be vertically moved to position at least one specific card at a bottom edge of the at least one card gripping / supporting element when the card gripping / supporting element moves to contact cards within the card collection area (column 6, lines 19-23 and Fig. 4, 116, Purton).

Regarding claim 18, at least one card gripping element comprises at least two gripping elements, at least one of which moves from a side of the collection area

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towards playing cards within the card collection area (column 7, lines 20-27 and Fig. 4, 127, Purton; rollers are elevated away from the cards and inherently may be lowered to the cards).

Regarding claims 19, 21 and 28, the microprocessor directs movement of an individual card into a gap in cards in the collection area between two segments of cards created by support of cards by at least one card gripping element (column 4, line 27 to column 5, line 4, column 8, lines 5-13 and Figs. 1 and 5, Purton; the gap is formed just before the card is moved to a position in the collection area).

Regarding claims 20 and 27, the microprocessor communicatively connected to the device is programmed to lower the card collection surface within the card collection area after the at least one element / card supporting element has contacted and supported cards within the card collection area, creating two segments of cards and a gap between the segments (column 6, lines 5-11 and Fig. 2, 20, Purton; the segments of cards and gap between segments is formed just after the card collection surface is lowered).

Purton suggests that a device is needed for card inspection or sorting so as to ensure that a deck of cards is properly integrated with no extra cards and without manual inspection (column 1, lines 9-26, Purton).

Thus, it would have been obvious to one having ordinary skill in the art at the time the applicant's invention was made to modify Johnson '248 in view of the teachings of Johnson '085 and further in view of Purton for the purpose of exchanging the interchangeable features of the card shuffling apparatus of Johnson '248 alone or in combination with the features of Johnson '085 with the features of Purton to provide

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card placement within the card collection area in order to automate the process of integrating cards to eliminate the need for manual inspection.

Claims 2, 44 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson '248 in view of Johnson '085 as applied to claims 1, 43 and 46, respectively, above, and further in view of Huen (US Patent 5,240,140). Figures are described with reference characters where necessary for clarity.

Johnson '248 and Johnson '085 disclose all the features described above. The claimed features of claims 2, 44 and 49 that are substantially lacking in Johnson '248 alone or in view of Johnson '085, but taught by Huen are as follows:

Regarding claim 2, the elevator raises all randomized cards above the top surface of the device (column 2, lines 8-11 and 46-48, Johnson '248; it is shown that the cards in the storing spaces are raised to a top surface) and the moveable cover is automatically raised to allow the randomized cards to rise above the top surface of the device (column 3, lines 29-39 and Figs. 1 and 3, Huen).

Regarding claim 44, an automatically movable cover is closed at least part of the time over at least one of the card receiver and collection surface (column 2, lines 16-24 and Fig. 1, Huen; the cards are forced against the lid to automatically open the lid, the lid being closed part of the time until opened).

Regarding claim 49, there is an automatically moveable cover over the elevator as part of the access (column 2, lines 16-24 and Fig. 1, Huen; the cards are forced against the lid to automatically open the lid, the lid being closed part of the time until opened and when opened provide access to the cards therein).

Huen suggests that a card dispensing device having a compartment accessible via a lid is needed to accommodate or present a stack of cards before or after shuffling and deal or distribute cards before use so as to remove the dead time between games (column 1, lines 6-25, Huen).

Thus, it would have been obvious to one having ordinary skill in the art at the time the applicant's invention was made to modify Johnson '248 in view of the teachings of Johnson '085 and further in view of Huen for the purpose of providing the card shuffling apparatus of Johnson '248 alone or in combination with the features of Johnson '085 with the moveable cover feature of Huen in order to protect cards during the shuffling process and present cards automatically to the user after shuffling.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

E US-6,726,205 B1, Purton

F US-6,149,154, Grauzer et al.

G US-6,254,096 B1, Grauzer et al

H US-5,944,310, Johnson et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arthur O. Hall whose telephone number is (571) 270-1814. The examiner can normally be reached on Mon - Fri, 8:00am - 5:00 pm, Alt Fri, EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Jackson can be reached on (571) 272-4697. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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AH

4/2/2007

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